REMARKS

Claims 16-23 are pending. Claim 21 stands withdrawn from further consideration as being directed to a non-elected invention.

A listing of claims is submitted herewith, which indicates the correct status of claim 21 as withdrawn.

Claims 16-20, 22 and 23 were rejected under 35 USC §103(a) as being unpatentable over Tsang in view of Chen et al. This rejection is respectfully traversed.

Tsang is again applied for its disclosure of growing a compound semiconductor epitaxial layer on a substrate, forming a protective film having an opening on a surface of the compound semiconductor epitaxial layer, and selectively growing a ridge-shaped compound semiconductor epitaxial layer to cover the opening.

Chen et al. is applied for its disclosure of an off-angle of 2°. The Examiner argues that it would have been obvious to grow a compound semiconductor epitaxial layer on a substrate having an off-angle of 2°, in order to form a "laser that can suppress lateral higher order modes."

There would have been no motivation to combine the references in the manner as suggested by the Examiner. In particular, although Chen et al. teaches that its lasers can suppress lateral higher order of modes, there is no teaching or suggestion that such is due to the selection of a misoriented substrate. Thus, the Examiner's rationale of motivation does not exist. The

mere fact that use of off-angle substrates is known would not have motivated one of ordinary skill in the art to employ such an angle in the claimed method.

It appears that Chen et al. may be similar to the admitted prior art discussed in the present specification. The specification discusses that the conventional method of forming the ridge portion by etching is difficult to accurately control the thickness of the cladding layer at the non-ridge portion. Furthermore, it is taught that the use of the substrate having a larger off-angle can suppress formation of natural super lattice and generation of step bunching, but which impede the wavelength from becoming shorter as well as to suppress the oscillation threshold current from increasing due to shortened wavelength from p-type high concentration doping and impairment of temperature characteristics.

One of ordinary skill in the art would not have been motivated to modify Tsang to employ a larger off-angle. More specifically, if an off-angle substrate is used in Tsang, DFB laser function becomes poor. This is because bilateral symmetry is lost due to the off-angle and therefore a distributed feed back grating having a predetermined period can not be produced as designed. Thus, although Chen et al. teaches use of an off-angle of 2°, Chen et al. does not provide any motivation to employ such an off-angle in Tsang. That is, Chen et al. fails to provide any teaching or suggestion which could have motivated one of ordinary skill in the art to modify the teachings of Tsang to employ a larger off-angle.

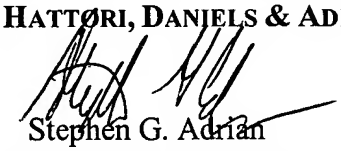
For at least the foregoing reasons, the claimed invention distinguishes over the cited art and defines patentable subject matter. Favorable reconsideration is earnestly solicited.

Should the Examiner deem that any further action by applicants would be desirable to place the application in condition for allowance, the Examiner is encouraged to telephone applicants' undersigned attorney.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP



Stephen G. Adrian
Attorney for Applicants
Registration No. 32,878
Telephone: (202) 822-1100
Facsimile: (202) 822-1111

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